

Docket No.: A-3772

**MAIL STOP: APPEAL BRIEF-PATENTS**

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Before the Board of Patent Appeals and Interferences

Applic. No.	:	10/624,954	Confirmation No.:	6281
Inventor	:	Steffen Derhardt		
Filed	:	July 22, 2003		
Title	:	Device for Throwing-On Impression and Throwing-Off Impression in a Printing Press and Printing Press Having the Device		
TC/A.U.	:	2854		
Examiner	:	Jill E. Culler		
Customer No.	:	24131		

Hon. Commissioner for Patents  
Alexandria, VA 22313-1450

**BRIEF ON APPEAL**

Sir:

This is an appeal from the final rejection in the Office action dated September 8, 2008, finally rejecting claims 1 - 8.

Appellant submits this *Brief on Appeal* including payment in the amount of \$540.00 to cover the fee for filing the *Brief on Appeal*.

Real Party in Interest:

This application was assigned to Heidelberger Druckmaschinen AG of Germany in an Assignment recorded on October 10, 2003.

Related Appeals and Interferences:

No related appeals or interference proceedings are currently pending which would directly affect or be directly affected by or have a bearing on the Board's decision in this appeal.

Status of Claims:

Claims 1 - 8 are rejected and are under appeal.

Status of Amendments:

No claims were amended after the final Office action.

Summary of the Claimed Subject Matter:

The subject matter of each independent claim is described in the specification of the instant application. Examples explaining the subject matter defined in each of the independent claims, referring to the specification by page and line numbers, and to the drawings, are given below.

According to 37 CFR § 41.37(c)(1)(v) *Summary of Claimed Subject Matter*, only the subject matter defined in each of the appealed independent claims is to be explained by page and line number of the specification.

Regarding the dependent claims, it is only means plus function clauses which need to be explained.

Claims 1 and 8 are the only independent claims and there are no means plus function clauses in the appealed claims.

In the following concise explanation, the wording of claims 1 and 8 is bolded and the concise explanation is in parentheses.

Independent claim 1 reads as follows:

**A device for throwing-on impression and throwing-off impression in a printing press** (reference numeral 1, discussed on page 11, lines 6-14 and shown in Figs. 1 and 2), **comprising:**

**an impression cylinder** (reference numeral 2, discussed on page 11, lines 16-19 and page 13, lines 3-5 and shown in Figs. 1 and 2);

**a single cylinder** (reference numeral 3, discussed between page 11, line 16 and page 15, line 17 and shown in Figs. 1 and 2) **acting as a form cylinder, a blanket cylinder or both;**

**an applicator roller** (reference numeral 4, discussed between page 11, line 24 and page 13, line 15 and shown in Figs. 1 and 2);

**a roller throw-on and throw-off bearing** (reference numeral 5, discussed between page 12, line 15 and page 14, line 12 and shown in Figs. 1 and 2) **for throwing said applicator roller** (reference numeral 4, discussed between page 11, line 24 and page 13, line 15 and shown in Figs. 1 and 2) **on and off said single cylinder** (reference numeral 3, discussed between page 11, line 16 and page 15, line 17 and shown in Figs. 1 and 2), **said roller throw-on and throw-off bearing** (reference numeral 5, discussed between page 12, line 15 and page 14, line 12 and shown in Figs. 1 and 2) **including a rotatably mounted first actuating element;**

**a cylinder throw-on and throw-off bearing** (reference numeral 6, discussed between page 12, line 20 and page 13, line 19 and shown in Figs. 1 and 2) **for throwing said single cylinder** (reference numeral 3, discussed between page 11, line 16 and page 15, line 17 and shown in Figs. 1 and 2) **on and off said impression cylinder** (reference numeral 2, discussed on page 11, lines 16-19 and page 13, lines 3-5 and shown in Figs. 1 and 2), **said cylinder throw-on and throw-off bearing** (reference numeral 6, discussed between page 12, line 20 and page 13, line 19 and shown in Figs. 1 and 2) **including a rotatably mounted second actuating element** (reference numeral 7, discussed between page 12, line 22 and page 15, line 17 and shown in Figs. 1 and 2);

**a coupler** (reference numeral 11, discussed between page 13, line 17 and page 14, line 7 and shown in Figs. 1 and 2) **forming a coupler mechanism together with said first** (part of reference numeral 5, discussed between page 12, line 15 and page 14, line 12 and shown in Figs. 1 and 2) **and said second** (reference

numeral 7, discussed between page 12, line 22 and page 15, line 17 and shown in Figs. 1 and 2) **actuating elements; and**

**a thrust joint** (reference numeral 12, discussed between page 13, line 17 and page 14, line 7 and shown in Figs. 1 and 2) **having a dead thrust travel** (reference symbol TS, discussed between page 35, line 14 and page 36, line 9 and shown in Fig. 2) **and articulately connecting one** (part of reference numeral 5, discussed between page 12, line 15 and page 14, line 12 and shown in Figs. 1 and 2) **of said actuating elements to said coupler** (reference numeral 11, discussed between page 13, line 17 and page 14, line 7 and shown in Figs. 1 and 2), **said thrust joint** (reference numeral 12, discussed between page 13, line 17 and page 14, line 7 and shown in Figs. 1 and 2) **having a slot** (reference numeral 13, discussed between lines 2 and 7 on page 14 and shown in Figs. 1 and 2) **and a joint pin** (reference numeral 14, discussed between lines 2 and 7 on page 14 and shown in Figs. 1 and 2), **said joint pin covering a thrust travel** (reference symbol TS, discussed between page 35, line 14 and page 36, line 9 and shown in Fig. 2) **within said slot** (reference numeral 13, discussed between lines 2 and 7 on page 14 and shown in Figs. 1 and 2) **while throwing said single cylinder** (reference numeral 3, discussed between page 11, line 16 and page 15, line 17 and shown in Figs. 1 and 2) **on and off said impression cylinder** (reference numeral 2, discussed on page 11, lines 16-19 and page 13, lines 3-5 and shown in Figs. 1 and 2), **and said slot** (reference numeral 13, discussed between lines 2 and 7 on page 14 and shown in Figs. 1 and 2) **having a length greater than said thrust travel** (reference symbol TS, discussed between page 35, line 14 and page 36, line 9 and shown in Fig. 2).

Independent claim 8 reads as follows:

**A printing press** (reference numeral 1, discussed on page 11, lines 6-14 and shown in Figs. 1 and 2), **comprising:**

**an impression cylinder** (reference numeral 2, discussed on page 11, lines 16-19 and page 13, lines 3-5 and shown in Figs. 1 and 2);

**a single cylinder** (reference numeral 3, discussed between page 11, line 16 and page 15, line 17 and shown in Figs. 1 and 2) **acting as a form cylinder, a blanket cylinder or both;**

**an applicator roller** (reference numeral 4, discussed between page 11, line 24 and page 13, line 15 and shown in Figs. 1 and 2); **and**

**a device for throwing-on impression and throwing-off impression, said device including:**

**a roller throw-on and throw-off bearing** (reference numeral 5, discussed between page 12, line 15 and page 14, line 12 and shown in Figs. 1 and 2)

**for throwing said applicator roller** (reference numeral 4, discussed between page 11, line 24 and page 13, line 15 and shown in Figs. 1 and 2)

**on and off said single cylinder** (reference numeral 3, discussed between page 11, line 16 and page 15, line 17 and shown in Figs. 1 and 2), **said**

**roller throw-on and throw-off bearing** (reference numeral 5, discussed

between page 12, line 15 and page 14, line 12 and shown in Figs. 1 and 2) **including a rotatably mounted first actuating element** (part of reference numeral 5, discussed between page 12, line 15 and page 14, line 12 and shown in Figs. 1 and 2);

**a cylinder throw-on and throw-off bearing** (reference numeral 6, discussed between page 12, line 20 and page 13, line 19 and shown in Figs. 1 and 2) **for throwing said single cylinder** (reference numeral 3, discussed between page 11, line 16 and page 15, line 17 and shown in Figs. 1 and 2) **on and off said impression cylinder** (reference numeral 2, discussed on page 11, lines 16-19 and page 13, lines 3-5 and shown in Figs. 1 and 2), **said cylinder throw-on and throw-off bearing** (reference numeral 6, discussed between page 12, line 20 and page 13, line 19 and shown in Figs. 1 and 2) **including a rotatably mounted second actuating element** (reference numeral 7, discussed between page 12, line 22 and page 15, line 17 and shown in Figs. 1 and 2);

**a coupler** (reference numeral 11, discussed between page 13, line 17 and page 14, line 7 and shown in Figs. 1 and 2) **forming a coupler mechanism together with said first** (part of reference numeral 5, discussed between page 12, line 15 and page 14, line 12 and shown in Figs. 1 and 2) **and said second** (reference numeral 7, discussed between page 12, line 22 and page 15, line 17 and shown in Figs. 1 and 2) **actuating elements; and**

**a thrust joint** (reference numeral 12, discussed between page 13, line 17 and page 14, line 7 and shown in Figs. 1 and 2) **having a dead thrust travel** (reference symbol TS, discussed between page 35, line 14 and page 36, line 9 and shown in Fig. 2) **and articulately connecting one** (part of reference numeral 5, discussed between page 12, line 15 and page 14, line 12 and shown in Figs. 1 and 2) **of said actuating elements to said coupler** (reference numeral 11, discussed between page 13, line 17 and page 14, line 7 and shown in Figs. 1 and 2), **said thrust joint** (reference numeral 12, discussed between page 13, line 17 and page 14, line 7 and shown in Figs. 1 and 2) **having a slot** (reference numeral 13, discussed between lines 2 and 7 on page 14 and shown in Figs. 1 and 2) **and a joint pin** (reference numeral 14, discussed between lines 2 and 7 on page 14 and shown in Figs. 1 and 2), **said joint pin** (reference numeral 14, discussed between lines 2 and 7 on page 14 and shown in Figs. 1 and 2) **covering a thrust travel** (reference symbol TS, discussed between page 35, line 14 and page 36, line 9 and shown in Fig. 2) **within said slot** (reference numeral 13, discussed between lines 2 and 7 on page 14 and shown in Figs. 1 and 2) **while throwing said single cylinder** (reference numeral 3, discussed between page 11, line 16 and page 15, line 17 and shown in Figs. 1 and 2) **on and off said impression cylinder** (reference numeral 2, discussed on page 11, lines 16-19 and page 13, lines 3-5 and shown in Figs. 1 and 2), **and said slot** (reference numeral 13, discussed between lines 2 and 7 on page 14 and shown in Figs. 1 and 2) **having a length greater than said thrust travel** (reference symbol TS, discussed between page 35, line 14 and page 36, line 9 and shown in Fig. 2).



Grounds of Rejection to be Reviewed on Appeal:

Whether or not claims 1-8 are obvious over U.S. Patent No. 1,542,027 to Blaine in view of U.S. Patent No. 6,490,974 to Wadlinger et al. (hereinafter Wadlinger) under 35 U.S.C. § 103(a).

Argument:

The Invention of the Instant Application:

Referring to Fig. 1, it is seen that in the instant application as claimed, an applicator roller 4, a single cylinder 3 (which can act as a blanket cylinder or a form cylinder or both) and an impression cylinder 2 are present. The applicator roll 4 can be thrown on and off the single cylinder 3 (which can act as a blanket cylinder or a form cylinder or both) and the single cylinder 3 (which can act as a blanket cylinder or a form cylinder or both) can be thrown on and off the impression cylinder 2.

A roller throw-on and throw-off bearing 5, which is provided for throwing the applicator roller 4 on and off the single cylinder 3, has a rotatably mounted first actuating element. A cylinder throw-on and throw-off bearing 6, which is provided for throwing the single cylinder 3 on and off the impression cylinder 2, has a rotatably mounted second actuating element 7. A coupler 11 forms a coupler mechanism together with the first and said second actuating elements 5, 7.

A thrust joint 12 having a dead thrust travel TS articulately connects one of said actuating elements 5 to the coupler 11. The thrust joint 12 has a slot 13 and a joint pin 14. The joint pin 14 covers a thrust travel TS within the slot 13 while throwing

the single cylinder 3 on and off the impression cylinder 2. The slot 13 has a length greater than the thrust travel TS.

The Blaine Reference:

The Blaine reference discloses an inking roll trip mechanism for printing presses, having a main frame 12 on which a form cylinder 10 and a blanket cylinder 11 are mounted. The blanket cylinder 11 is to be engaged by a non-illustrated impression cylinder. Form inking or applicator roller rollers 14, vibratory rollers 9 and rider rollers 15 are mounted on a roller frame 16, which is in turn mounted in the main frame 12. Arms 21 are articulated between links 23, 28 and cams 20. The cams 20 move the roller frame 16 upward to raise the form inking rollers 14 upward out of engagement with the form cylinder 10. Therefore, Blaine discloses a coupling drive for throwing off (or disengaging) the rollers 14.

Thus, Blaine discloses that the inking or applicator roller 14 can be thrown on and off the form cylinder 10 by a mechanism 18, 20, 21 and 23 and the blanket cylinder 11 can be thrown on and off a non-illustrated impression cylinder. The form cylinder 10 in Blaine cannot be thrown on and off an impression cylinder. The rubber blanket cylinder 11, but not the form cylinder 10, can be thrown on and off the non-illustrated impression cylinder.

Blaine does not show a single cylinder acting as a form cylinder, a blanket cylinder or both, as recited in claims 1 and 8 of the instant application, but instead Blaine has both a form cylinder 10 and a blanket cylinder 11 which are separate from one another.

The Wadlinger Reference:

Wadlinger teaches a sheet-guiding device for a printing press in which a printing unit 5 has an impression cylinder 7 and an applicator cylinder 9. As is shown in Fig. 6, a sheet guiding device 15 has a sheet guiding element 14. A transmission mechanism 26 coupling the sheet guiding element 14 to the applicator cylinder 9 has a pivoting lever 27 and a coupling bar 28. A rotary and thrust joint 29 connects one end of the coupling bar 28 to the pivoting lever 27, while the other end is connected to the applicator cylinder 9. An actuator 25 displaces the applicator cylinder 9 for withdrawal from the impression cylinder 7 and displaces the sheet guiding element 14 into a nip 13.

Therefore, Wadlinger provides a mechanism for adjusting the sheet guiding element 14 and that mechanism connects the sheet guiding element 14 to the cylinder 9 (see column 6, lines 46-47 of Wadlinger). Since the cylinder 9 can be engaged with or disengaged from the impression cylinder 7 (see column 4, lines 60-62), the cylinder 9 can be compared with the form and/or rubber blanket cylinder 3 of the invention of the instant application. The cylinder 9 of Wadlinger is also comparable to the rubber blanket cylinder 11 in Blaine.

The Absence of a Thrust Joint having a Slot with a Length  
Greater Than a Thrust Travel in the Prior Art:

As stated by the Examiner on pages 2 and 3 of the September 8, 2008 Office Action, Blaine does not teach a thrust joint having a dead thrust travel. However, the Examiner relies on the Wadlinger reference to show a thrust joint 29 having a dead thrust travel.

Blaine does not show a thrust joint having a slot and a joint pin and the Examiner does not allege otherwise. The Examiner does acknowledge on page 3, last paragraph of the September 8, 2008 Office Action, that Wadlinger “is silent concerning the length of the slot for the thrust joint with respect to the distance of the thrust travel.”

The Examiner's Attempt to Use a Reference Which Does Not Show a Limitation, to Show the Limitation, Merely Because the Reference Does Not State that the Limitation is Not Present:

The Examiner goes on, in the last paragraph on page 3 of the September 8, 2008 Office Action, to state that “Although there is no explicit teaching that the slot has a length greater than the thrust travel, there is no teaching that this is not the case.” Therefore, the Examiner presents an obstacle to patentability which is impossible for any Applicant to overcome.

Although she acknowledges that a claim limitation is missing from the reference, the Examiner believes that the reference can nevertheless be used to show the limitation because the reference does not teach that the limitation is not in the reference.

If this reasoning of the Examiner were to be upheld, no patents could ever be issued, since any reference could be used to show any limitation that the reference did not explicitly say is absent.

The Patentable Significance of the Length of the Slot Being Greater  
Than the Thrust Travel:

The Examiner next states that "the length of the slot would appear to be a matter of design choice, having no apparent patentable significance and therefore is considered to be obvious to be one having ordinary skill in the art."

However, as will be shown below and as discussed in the Specification of the instant application, the length of the slot being greater than the thrust travel provides significant advantages over the prior art.

The limitation of claims 1 and 8 calling for the length of the slot being greater than the thrust travel of the pin has patentable significance because it makes it possible for the device and printing press in accordance with the invention to be operated as desired in a first printing operating mode and in a second printing operating mode.

In the first printing operating mode, the printing material is printed in the offset printing units and then varnished in the varnishing printing unit. It is required in this first printing operating mode to set a distance of, for example, 1.2 mm between the cylinders 2, 3. See page 32, line 2 of the Specification of the instant application.

In the second printing operating mode, the printing material is only printed in the offset printing units and not in the varnishing printing unit. It is required for the second printing operating mode to set a distance between the cylinders 2, 3, which is much greater than the distance in the first printing operating mode and may, for example, be 20 mm. See page 31, lines 23-24 of the Specification of the instant

application. Without the distance being much greater, for example 20 mm, the printing material would come into contact with the cylinder 3 in the second printing operating mode and, in that case, the offset printing ink would smear off the printing material onto the cylinder 3.

It is advantageous for the operator of the printing machine to be able to choose between the two printing operating modes, because some printing products to be printed require additional varnishing and other printing products do not require such varnishing. It is advantageous for the operator to be able to produce both types of printing products on one and the same machine and not require two different printing machines therefor.

In order to be able to correctly adjust both distances of, for example, 1.2 mm and 20 mm between the cylinders 2, 3 for the respective printing operating mode, the claim limitation under discussion – that the length of the slot is longer than the thrust travel of the pin – is indispensable. The mechanism as defined by the invention would not render it possible to operate the printing machine as desired in both printing operating modes without this claim limitation. In other words, without this claim limitation, the invention would not work.

The Impossibility of Combining the Blaine and Wadlinger References:

The Examiner's argumentation that it is obvious to combine Blaine and Wadlinger does not comply with MPEP 2143.01 V., because it would render the prior art unsatisfactory for its intended purpose.

The Examiner alleges that a person of ordinary skill in the art would transfer the rotary and thrust joint having a slot in Wadlinger onto the mechanism in Blaine. An inspection of Fig. 1 of Blaine shows that the mechanism shown therein has a plurality of rotary joints. Those rotary joints each have a circular bore in which the joint bolt fits perfectly well. If such a joint bore wears out in the course of time due to wear and tear, the function of the mechanism is adversely affected. The mechanism then works imprecisely and, in the worst case, the mechanism does not work at all.

If the person of ordinary skill in the art were to replace one of the rotary joints in Blaine with the rotary and thrust joint having the slot in Wadlinger, then the slot would have the effect of an extremely worn out joint bore and would render the function of the mechanism impossible.

However, even if the person of ordinary skill in the art did not intend to replace one of the rotary joints in Blaine with the rotary and thrust joint having the slot in Wadlinger, but instead intended to integrate the rotary and thrust joints having the slot in Wadlinger in addition to the rotary joints already present in Blaine into the mechanism in Blaine, the person of ordinary skill in the art would technically not be successful.

That is because if the rotary and thrust joint having the slot in Wadlinger were to be integrated into any one of the rods (bars) of the mechanism in Blaine, then that rod (bar) could no longer properly transfer the movement transferred onto it onto

another machine part. The rotary and thrust joint having the slot in Wadlinger, in that case, would also render the function of the mechanism in Blaine impossible.

The honorable Board is therefore respectfully urged to reverse the final rejection of the Primary Examiner.

If an extension of time is required for this submission, petition for extension is herewith made. Any fees due should be charged to Deposit Account No. 12-1099 of Lerner Greenberg Sterner LLP.

Respectfully submitted,

/Laurence A. Greenberg/  
Laurence A. Greenberg  
Reg. No. 29,308

LAG/lq

Date: February 11, 2009

Lerner Greenberg Sterner LLP  
Post Office Box 2480  
Hollywood, Florida 33022-2480  
Tel: (954) 925-1100  
Fax: (954) 925-1101



Claims Appendix:

1. A device for throwing-on impression and throwing-off impression in a printing press, comprising:

an impression cylinder;

a single cylinder acting as a form cylinder, a blanket cylinder or both;

an applicator roller;

a roller throw-on and throw-off bearing for throwing said applicator roller on and off said single cylinder, said roller throw-on and throw-off bearing including a rotatably mounted first actuating element;

a cylinder throw-on and throw-off bearing for throwing said single cylinder on and off said impression cylinder, said cylinder throw-on and throw-off bearing including a rotatably mounted second actuating element;

a coupler forming a coupler mechanism together with said first and said second actuating elements; and

a thrust joint having a dead thrust travel and articulately connecting one of said actuating elements to said coupler, said thrust joint having a slot and a joint pin, said joint pin covering a thrust travel within said slot while throwing said single

cylinder on and off said impression cylinder, and said slot having a length greater than said thrust travel.

2. The device according to claim 1, wherein said first actuating element is an eccentric bushing.

3. The device according to claim 1, wherein said second actuating element is a cam ring.

4. The device according to claim 1, wherein said thrust joint connects said first actuating element to said coupler.

5. The device according to claim 1, wherein said thrust joint is a rotary and thrust joint.

6. The device according to claim 5, wherein said joint pin is to be rotatably and displaceably guided in said slot.

7. The device according to claim 1, wherein said applicator roller is associated with said at least one of said form and blanket cylinder as a single applicator roller.

8. A printing press, comprising:

an impression cylinder;

a single cylinder acting as a form cylinder, a blanket cylinder or both;

an applicator roller; and

a device for throwing-on impression and throwing-off impression, said device including:

a roller throw-on and throw-off bearing for throwing said applicator roller on and off said single cylinder, said roller throw-on and throw-off bearing including a rotatably mounted first actuating element;

a cylinder throw-on and throw-off bearing for throwing said single cylinder on and off said impression cylinder, said cylinder throw-on and throw-off bearing including a rotatably mounted second actuating element;

a coupler forming a coupler mechanism together with said first and said second actuating elements; and

a thrust joint having a dead thrust travel and articulately connecting one of said actuating elements to said coupler, said thrust joint having a slot and a joint pin, said joint pin covering a thrust travel within said slot while throwing said single cylinder on and off said impression cylinder, and said slot having a length greater than said thrust travel.

Evidence Appendix:

No evidence pursuant to §§ 1.130, 1.131, or 1.132 or any other evidence has been entered by the Examiner and relied upon by Appellant in the appeal.

Related Proceedings Appendix:

No prior or pending appeals, interferences or judicial proceedings are in existence which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in this appeal. Accordingly, no copies of decisions rendered by a court or the Board are available.